

Polypropylene

An Environmentally Responsible Product.

Polypropylene is made up from **carbon** and **hydrogen**, and is manufactured without any dangerous emissions.

Polypropylene is ecologically sound.

Polypropylene is one of the easiest plastics to recycle: it can be re-used up to 50 times without appearing to lose strength. PP can be incinerated, or disposed of in landfill sites without any harm to the environment. When burnt or incinerated, polypropylene will only give off water vapour or carbon dioxide, which is converted by photosynthesis (chlorophyll). To incinerate some materials, extra fuel needs to be added - polypropylene, however, is destroyed simply by burning because its calorific capacity is similar to that of oil. Thus incinerators economize on fuel and operate more efficiently.

PP is up to 35% lighter than PVC or PET, meaning that one only needs 13 tons of PP for every 20 tons of PVC or PET for the same application.

Polypropylene uses relatively little energy in its production process, compared with other plastic materials. It has a relatively low melting point (roughly half that of PET), and it uses no water (except for a closed cooling system). There are no harmful emissions during the production process of polypropylene.

All production waste is recycled, and there are no dangerous emissions or by-products during the manufacturing process. Polypropylene does not contain any heavy metals or plasticizers, and is chemically stable (inert). Post consumer waste can be reclaimed without any difficulties.

Polypropylene is resistant to water and most oils, greases and chemical products. It is extremely hardwearing, and does not break or tear. When polypropylene is creased, a change in the molecular structure increases the material's resistance to mechanical stress. Polypropylene lasts much longer than similar materials (PVC/ acetate/cellulose) and withstands extreme temperatures and aging.

Polypropylene satisfies the four requirements of the EC "Environment Commission":

1. Minimum use of natural resources
2. Reduced emission of polluting substances
3. Long working life
4. Optimized re-use and recycling

Because it is a high performance plastic which respects the environment (air, water, earth) and has intrinsic conversion advantages (it can be stitched, cut, creased, welded, folded, litho printed, screen printed, foil blocked), polypropylene is the material of the future.